

PATENT APPLN. NO. 10/566,655
RESPONSE UNDER 37 C.F.R. §1.111

PATENT
NON-FINAL

REMARKS

Claim 1 has been amended to include the limitations of claims 6 and 13. Claim 3 has been amended to include the limitations of claims 10 and 15. Claims 6, 10 and 13-16 have been canceled.

Claim Rejections - 35 USC § 112

Claims 6 and 10 are rejected under 35 U.S.C. § 112, second paragraph, as being definite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The position of the Office is that the claims are indefinite because the transition metal complex oxide having the formula recited in claims 6 and 10 does not include zirconium whereas the independent claims require that the transition metal complex oxide include zirconium.

The 35 U.S.C. § 112, second paragraph, rejection has been overcome by the amendments to claims 1 and 3 which clarify that the zirconium is contained in the positive electrode and not within the transition metal complex oxide, per se. This fact is clear from the description, for example, in Example 1 of the preparation of the positive electrode material where it is describes the mixing and heat treatment of certain materials "to obtain a positive active material which contained a lithium transition metal complex oxide represented by $\text{LiMn}_{0.33}\text{Ni}_{0.33}\text{Co}_{0.34}\text{O}_2$ and having a mean particle

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diameted of about 10 μm and also contained zirconium. In the positive electrode material, the zirconium compound is believed to be attached to a surface of the lithium transition metal complex oxide.

Claim Rejections - 35 USC § 102

Claims 1, 7 and 8 are rejected under 35 U.S.C. § 102(b) as being anticipated by Okabe et al. (JP 2003-031219).

This rejection has been overcome by the amendment to claim 1 to include the limitations of claims 6 and 13.

Claim Rejections - 35 USC § 103

Claims 2, 13 and 14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Okabe et al. (JP 2003-031219).

Claims 3, 11, 12 and 15-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Okabe et al. (JP 2003-031219).

Claims 5 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Okabe et al. (JP 2003-031219) as applied to Claims 1, 2, 3, 5, 7, 8 and 11-16 above, and in further view of Uemura et al. (US 2002/0012830 A1).

Removal of these rejections is respectfully solicited. The amendments to claims 1 and 3 limit all of the rejected claims to a nonaqueous electrolyte secondary battery in which the positive electrode contains a lithium transition metal complex oxide of the

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specified formula and also contains zirconium in an amount of 0.1 % to 1 % by mole, based on the total amount of the transition metals. A person skilled in the art would not have been motivated and would not have had any reason to modify the compound oxide of Okabe to include zirconium in an amount as recited in claims 1 and 3 with predictable results.

First, Zr is not included among the elements preferred as the element M in the compound oxide in paragraph [0025]. Also, there is no specific example using Zr as element M.

Second, Okabe discloses that the amount of element M is preferred to especially satisfy $0.05 \leq b$ to "show higher safety." This description is an implicit teaching or suggestion that lesser amounts of M will not provide the desired safety and leads away from reducing the amount of M to an amount as low as 1 mole %.

Although there may be case law that suggests that in certain circumstances, the discovering of an optimum amount of a result effective variable involves only routine skill in the art, the Office must first establish that the variable is, in fact, a result effective variable. There is no basis in Okabe to support the position of the Office that a reduced amount of M is a result effective variable. Moreover, optimization is precluded where the prior art teaches away from the necessary modification of the prior

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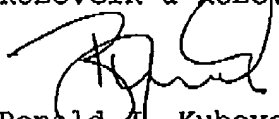
Removal of the 35 U.S.C. § 112, 35 U.S.C. § 102 and 35 U.S.C. § 103(a) grounds of rejection is in order and is respectfully requested.

The foregoing is believed to be a complete and proper response to the Office Action dated February 27, 2009.

In the event that this paper is not considered to be timely filed, applicants hereby petition for an appropriate extension of time. The fee for any such extension may be charged to our Deposit Account No. 111833.

In the event any additional fees are required, please also charge our Deposit Account No. 111833.

Respectfully submitted,
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